

MARC

[illegible]

Ricky Brown *	N9VDX	Edinburgh	Tech
Pam Caudill		Brownstown	NC Tech
Daryl Dezarn	N9XDU	Camby	Tech
William Norris		Indianapolis	NC Tech
Ralph Stevens		Manilla	NC Tech
Hironori Suzuki	KB9IYD	Seymour	Tech
Daryl Wicker		Greenfield	NC Tech

A New Look for your License!

Service licenses.

Amateur license upgrades and changes of address, call sign, or name change are processed with the original expiration date intact. That is, they are not renewed for a new 10-year term.

Persons who became a Technician with HF privileges with a license begin-date prior to June 8, 1994 must continue to retain their

The license form itself, FCC Form 660, is also changed. On the new form, dated May 1994, the FCC has moved the Operator Privileges and Station Privileges section on the pocket-sized license from the right-hand side to the left-hand side of the form. Only the operator's signature now appears on the right-hand side.

This change on the FCC's part was to bring the Commission's amateur service licensing process into conformity with that of the other services it administers, where a licensing fee is required and charged.

This does not mean that the FCC is going to begin charging amateur licensees a fee! However, a fee will probably be charged for "vanity" call signs if the vanity program is adopted.

Meeting saturday:

Report of the Nominating committee and VE Testing. Be there!



Welfare Traffic

As the hurricane season heats up many ham radio operators with phone privileges are gearing up to handle emergency traffic. One of those people that has lived that experience is Paul Easley, KA9KAI.

Paul and his family have spent nearly six years as missionaries living in Guatemala and Honduras. According to Paul it has been a blessing to have his ham radio license while living in South America. It proved invaluable last fall!

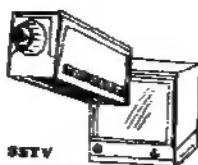
As hurricane Gert slammed into South America it quickly downgraded to a tropical storm. The torrential rains caused widespread flooding and left 30 thousand people homeless. It severely damaged the banana crop.

Paul and fellow hams spent almost two weeks assisting the military with emergency communications. "The military found that their communications system was ill-equipped to handle the situation," Paul said.

As new hurricanes threaten the Caribbean and South America you can follow the action by tuning your HF rig to the Hurricane Health and Welfare Net at 14.275 MHz.

Did you miss the club picnic at Mt. Nebo last year? Try to make it in 94 on September 17th!

August program: Slow-Scan TV



Tom Jenkins, N9AMR, will make his TV debut at the August meeting of MARC. Tom will demonstrate the exciting hobby of slow scan tv.

Over the past eight years, Tom has become one of the leading ham radio authorities on slow scan. He has developed special computer software for SSTV that allows amateur radio operators to send color pictures over the HF airwaves.

Everytime you watch your favorite news show or sitcom you are watching fast scan tv. It's 525 lines of information transmitted in a short time to create moving pictures. Slow scan takes much longer and produces only one picture.

Tom will show us the necessary equipment, explain the process, and demonstrate how it works. Join us Saturday August 20th for the fast paced world of Slow Scan TV!

Upcoming Club Events

August 20th "Slow Scan TV" with Tom Jenkins, N9AMR

September 17th "Live Steam Picnic" Election of officers for 1995

October 15th "DSP" with John Scott, WM9U

November 19th "MARS" with Ed Woods, WD9DVA



The club picnic at Nebo

All aboard for the next train to Mt. Nebo! Saturday, September 17th, the Mid-State ARC will hit the road, er railroad, and hold our regular club meeting at the Live Steam railroad park near Mt. Nebo, Indiana.

The park is located deep in the wooded hills and hollars of northern Morgan county on Rt. 252 near Martinsville.

This will be a pitch-in picnic where you can bring the entire family. The scheduled start time is 11 a.m. with lunch about 12 noon and train rides all afternoon.

Kids from five to sixty-five will love riding the 1/8 scale trains. Mt. Nebo is the home of a 3/4 mile long miniature railroad, hand built by the Indiana Live Steam Association. Club members Ron Gaertner, WB9NVM, and Bruce McClary, KA9AWW, will be our hosts for the day.

We will elect new officers following lunch. What better way to keep MARC on the right track than by combining a day of food, fun and riding the rails with the family!

A map will be provided at the August meeting and in the September Spark Gap Newsletter. See ya there! - NT9J



*** He had a bad accident, but the doctor told him he would be walking again in no time. It was true. He had to sell his car to pay the doctor bill.

*** A shin is a device for finding furniture in the dark.

*** The best actors at an award show are the losers - the good losers.

*** Life isn't fair. The young don't know what to do, and the old can't do what they know.

*** An antique is something that's too old for the poor, but not too old for the rich.

*** He's carefree. He doesn't care as long as it's free.

*** He's so cheap! He got married in his own backyard so the chickens could have the rice!

*** Puzzled by an item on the menu in a Chinese restaurant, a customer asked the waiter to explain it- chicken fried rice ding. The waiter said, "We mix all the ingredients and put them in the microwave oven"

The customer asked, "What's the ding for?"

The waiter answered, "That's the timer."

*** You feel sorry you're a smoker when you're being chased by a mugger who isn't!

*** A clock is something that wakes people who don't have kids.

*** Peterson visits his son in college and knocks on the door of the youngster's dorm. "Does Tommy Peterson live here?"

A voice from beyond the door says, "Yeah. Bring him in."

*** The newest kind of computer came out the other day. Somebody asked it, "What will the USA be like in 2020?"

The answer came back in Japanese.

*** Congressmen have stopped passing the buck. Now, they keep it.

*** The truth will make you free - unless you're a criminal... then the courts will make you free.

*** It was his first sea cruise, and he was spending it in his cabin, a victim of intense seasickness. The steward knocked on the cabin door and asked, "May I bring you some dinner?" "No," was the answer, "just throw it overboard directly!"

*** They're carrying the diet fads too far. One mortuary is advertising that they're using formaldehyde-lite.

*** There's a great new pasta diet: walk past a bakery, walk past a candy store, walk past an ice-cream shop.

*** A patient tells her doctor, "I've consulted a fortune-teller, a palm reader, Tarot cards, and a faith healer."

"And what dumb advice did these quacks give you?"

"They told me to go see you."

*** How come when you're driving, anybody going slower than you is a moron, and anybody driving faster is a maniac?

*** You don't need manners if you're a five-ton truck.

*** Two old codgers went fishing one morning. Sitting in the boat, neither of them said a word for hours. Then one shuffled his legs a little, trying to work out a cramp. He shuffled his legs again about two hours later. His buddy looked up and said, "Did you come to fish or to practice your dancing?"

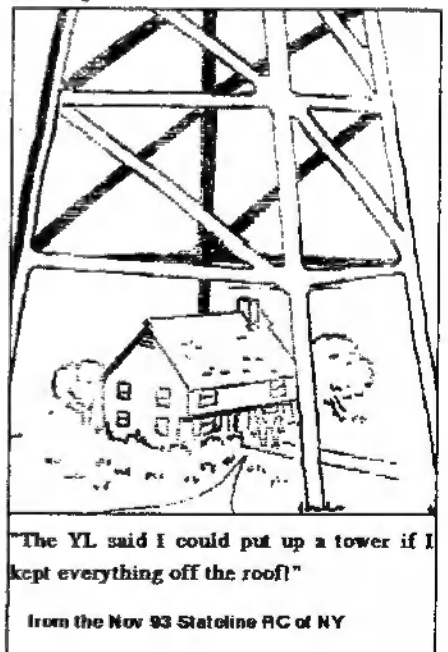
*** Angered at what he felt was a bad call, a pro football player yelled at the referee, "You stink to high heaven!"

The referee picked up the ball, walked off fifteen yards, and said, "Can you still smell me?"

*** The club pro is giving a lesson to a duffer. Demonstrating the grip and stance, the club pro says, "In this first lesson, let me see you grip the club and swing. But don't hit the ball."

The duffer says, "I can do that already. Let's go on to the to the second lesson."

*** My greatest fear is that I'll be in line behind Mother Teresa at the Pearly Gates, and I'll hear Saint Peter say, "You didn't do enough!"



"The YL said I could put up a tower if I kept everything off the roof!"

from the Nov 93 Stateline PC of NY

Pajama party?

Here's one for the books. It's a true story that happened recently to Les Walton, KA4PQN, of Lithonia, Alabama.

Walton's adventure began when he stepped out to his carport about midnight one evening to check into the Turnip Truck Net on the 146.76 MHz repeater.

Having just gotten out of bed, Walton was in his pajamas. He intended to operate from his mobile rig so he wouldn't disturb his sleeping wife.

What Walton didn't anticipate was a DeKalb County policeman on patrol, who spotted him sitting half-dressed in his unlit carport and assumed he was some sort of prowler.

The blue lights went on and the public-address speaker said, "put your hands on top of the car". He stepped out of his Ford Tempo, arms reaching for the sky, with his microphone still in his hand.

Walton told the officer he wasn't dangerous, "being armed with nothing but a sharp wit." But, Walton says, the policemen didn't laugh; he just asked for identification, which Walton didn't have on his person.

To make matters worse, the repeater was dead because the Turnip Truck Net hadn't started yet. That made Walton's explanation suspicious.

Luckily, Walton had just been chatting with his friend Freddy, WA4VDP, on a simplex frequency. "If you'll allow me to change frequencies on this radio," Walton told the policeman, "I'll get

someone who can identify me by name and call letters and tell you where I live."

The policeman consented, and Walton switched to 146.58MHz, where he found Freddy.

The exchange went something like this:

Walton: "How about telling this DeKalb County policeman what I'm doing out here?"

Freddy: "What for?" (Walton asks us to imagine what he told Freddy later.)

Ultimately, Freddy identified Walton to the officer's satisfaction.

"My hat's off to the DeKalb County Police," Walton later allowed. "It's good to know they're patrolling our neighborhoods and watching our carports so carefully."

from the Nov 93 Atlanta ARC "Atlanta Ham"

Thumbing it?

by Steve Frick,
N4OGR



A hitch-hiker's thumb signals, "You furnish the car, gas, insurance, and upkeep; I'll ride and, if you have an accident, I'll sue you for damages."

Are there hitch-hikers in your club? - those who say, "You go to meetings, serve on committees, study issues, contact people-do the work; I'll attend meetings if it suits me. And if things don't suit me, I'll complain, criticize, or go hitch-hike with another club."

Don't be a hitch-hiker!

from the June 94 Old Virginia Hams ARC and

Give out no info!



By James
Cavanaugh,
KD1FW

After reading an interesting article in a magazine from our friends at Newington, I felt security needed emphasis. Here are some scenarios:

A couple of hams discuss travel on the club repeater. One says he is going to Dayton; the other says he will leave next Wednesday for a month-long vacation.

Another ham uses the autopatch to tell his wife not to prepare dinner for him, as he will be going out for the evening.

All these everyday events would be harmless but for one detail. They are transmitted over the air, where anyone can listen. Anyone includes the unscrupulous. With the help of a Callbook, a thief can use what he hears to his advantage. Thus, you could become a victim of your own words. It's not something you would wish on yourself or on others.

You can do something about it. You can be careful what you say on the air, especially when it concerns a trip, an evening out, who's minding the store, etc. You could even change your ham license address to a PO box, to keep your real address from future Callbook editions.

But above all, don't lull yourself into believing, "It will never happen to me!"

from the August 94 ARNS

HOBBIES



By Jim Gorka
N8MCF

I met someone new the other day. It seemed that we had nothing in common. While getting to know each other, the conversation led to a discussion of our hobbies. You know mine, his is fishing.

"Fishing is an art as well as a skill," he said, adding that in order to be a good fisherman, he studies the waters, time of year, time of day, and must be an expert at high-tech equipment, bait choices and more.

We soon discovered that we were both fishermen, so to speak, and here is why: He watches the weather, carefully choosing the right lake at the right depth at the right time of year for the right fish. I choose the right band, on the right antenna, for the best part of the day for the right location.

He studies the habits of the fish, carefully choosing the best bait. I carefully listen for the right call, to determine the exact frequency, and for what someone might be listening. He ties his own flies, ensuring that they are just perfectly mated to the line and terrain; I do the same, only with coaxial and balanced cables, ropes and wires.

He uses exacting electronic equipment, like depth-finding sonar, to help locate the big fish. I

also use exacting electronic equipment, like spectrum analysers and 'scope, to help locate the radio signals of pile-ups. His technique is well practiced, the right twitch at the right time and location. My technique is also well practiced, the right call at the right time and location.

We talked for quite a while, trying to contrast our hobbies. The more we talked, the more we determined that our hobbies differed only in the form of the tools we use and what we called our catch - and despite all of our exacting theory, hunches, techniques and expertise - when the bait is cast - or the call is made - neither of us is guaranteed to land the "Big One" - and that it is because of the thrill of just that suspense that we will continue to love and practice our own form of "fishing."

Do you recognize this MARC member?



Last month it was Homer, WB9OZZ. Nobody guessed!

Do you want to be one of the MARC mystery club members?

Send Mac NV9K a photo at the club address: Box 836, Franklin. Choose a good one! It will be mailed back to you.

Editorial

by Armond Noble, N6WR, publisher of Worldradio

A packet bulletin was talking up the idea of the 5 WPM CW test for General Class licenses. Mentioned was a 5 to 1 vote in favor in a poll on one of the computer services. I wonder what the ratio would be if the vote were on: "Would you like a weekly paycheck without having to show up for work?"

Some proponents have gone a bit off the deep end, saying that such would "stimulate the nation's economy." One industry person calculated that 100 million dollars in sales would happen instantly. Thousands of new jobs have been mentioned.

Personally, I am against such a move to lower our standards.

Would I benefit financially from double the number of hams (and subscribers) and more advertising revenue? Of course! But, when I am on that Caribbean cruise in the largest suite on the ship, I would still have to shave in the morning and I wouldn't want to look in the mirror and see Judas!

from August 94 Worldradio



Boy, it bugs me when they call me just an appliance operator!

Experience at Dayton

New ham relates problems at the Dayton Monsoon!

By David Powers, KB8RVS

I am a new ham, having just received my ticket in early April. This was going to be my first Dayton Hamvention, the granddaddy of them all. A good ham friend told me, "You've gotta go, you won't believe it!" I sent in my reservation, anticipating the "World's Fair of Amateur Radio."

I made excellent time to Dayton from Cleveland, OH, on Friday, 29 April, arriving in the area by 10 a.m. It was easy to find the repeater carrying the talk-in information and I listened for directions that would be helpful.

I parked about 50 feet from a waiting bus that also had "Hamvention" scrawled on a large piece of paper and taped to the windshield. After locking the car and grabbing my "stuff," I got on the bus.

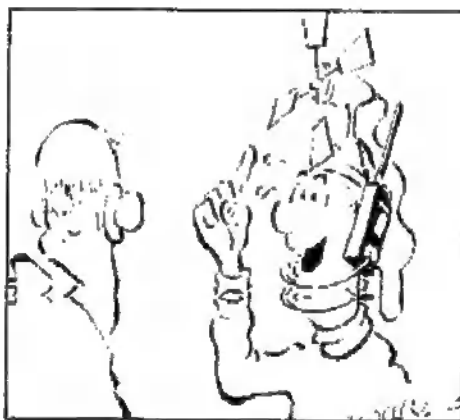
Now, I didn't want to seem like some inexperienced lid, so my HT was hidden in the fanny pack I had attached to my waist. I shouldn't have worried. I watched with great amusement as hams of all shapes and sizes poured into the bus with radios, antennas, speaker-mikes, battery packs, etc., hanging from their hats, glasses, belts, bags, wrists, fingers, legs, and what-have-you!

This sure WAS ham country! It made me want to dig out my

Kenwood TH-78A and yell, "Here's KB8RVS making his Hamvention debut!" Don't worry; I didn't.

Upon arrival at Hara Arena, I noted which bus I had taken, then proceeded to spend the day enjoying the pre-rainstorm flea market, the exhibits inside, and tried to enjoy the food and what I understood to be coffee.

After my last official business transaction, I headed for the parking lot to catch my bus to Salem Mall. The trip didn't take long, and I had a pleasant conversation with an elderly gentleman about hamming.



It's a wind-driven generator - if I run 5 miles it will recharge my battery pack!

I was confused when the bus arrived at the Mall because it didn't drop us off at the same place it picked us up. Undaunted, I made a sweep of the likely area, looking for my car.

Over an hour later, two walks completely around the huge parking lot, a cruise with both Mall Security and the local police made it clear that my vehicle wasn't there.

After making out a stolen vehicle report at the police department, I was on my way to the Dayton-Vandalia airport via Burger King courtesy of Officer Cantrell of the Trotwood police department to rent a car and drive home.

The next morning I was up early mulling over the situation: how to get the rental car back, how to replace my recently-paid-for vehicle, etc., when for some reason it occurred to me to consult my Hamvention program map. Two phone calls later my hunch was confirmed, and I quickly prepared for a return trip to soggy Dayton.

I was on a mission by this time, and even though southern Ohio received its entire allotment of spring rain that weekend, I sat for over an hour and a half on I-70 because of a monstrous, multi-vehicle accident, and was detoured to parts of Montgomery county I never knew existed.

I was eventually able to drop off the rental car at the airport, stride over to a waiting cab and confidently tell the driver, "Take me to Forest Park Plaza." Yup, I had taken the return bus to the wrong parking lot the day before!

Less than twenty minutes later, I was standing beside my little blue Plymouth Colt, thinking; I've got to be more careful when I listen to those repeater talk-ins.

Some debut for KB8RVS! The Hamvention? I loved it anyway!

from WORLDRADIO Aug 94



Balloon to fly for fox hunters

Grab your 70cm radio, dipole antenna and get ready for some Sunday morning fun. Sunday, August 28th, Chuck Crist, WB9IHS, will launch another balloon west of Indianapolis to test a 1.2 gigahertz ATV transmitter.

The four pound payload will also carry a 2-meter/70cm cross band repeater so the fox hunters can hone-in on the balloon as it floats across central Indiana.

According to Chuck, the balloon is expected to ascend to over 105 thousand feet before it bursts and floats back to earth by parachute. Under ideal conditions the balloon is expected to travel about 25 or 30 miles.

The Wind-Trax 94 fox hunters will use the 440.90 MHz output as their beacon and communications link while following the balloon. The 1.2 gig ATV transmitter, supplied by Dayton area hams, will also send out a beacon.

Chuck says the flight should only last a couple of hours. The short flight is designed to encourage area hams to participate in the balloon chase. Previous test flights have taken the fox hunters as far as eastern Kentucky and Columbus, Ohio.

Even if you don't have a buzz box and 440 dipole DFing antenna you can still follow the action by

listening to the cross band repeater at 440.90 MHz. You can also follow the action on 40 meters at 7.155.

If the launch team encounters strong morning winds the balloon will be launched from a point near Greencastle, Indiana. If light winds prevail the launch may take place closer to Indianapolis. Touchdown is expected to be within 25 miles of the launch point. Lift off is scheduled for 8 a.m. Sunday August 28th.

FCC fines an Indiana firm

The FCC has issued a Notice of Apparent Liability for \$20,000 to Ace Communications of Fishers, Indiana, for marketing illegal scanner radios that cover cellular phone frequencies. Ace, the FCC said, advertised two different unauthorized scanners in magazines including 73 Amateur Radio Today, CQ, and Popular Electronics.

Pancakes in the Flat Rock run

There were a lot of sleepy eyes trying to dial-in the proper simplex frequency last Saturday in Flat Rock, Indiana. Over a dozen MARC members rolled out of bed extra early to provide communications for the 8K run through the streets of this small Shelby County community.

All eighteen radio operators checked in by 6 AM and got their assignments while enjoying an "all you can eat" sausage and pancake breakfast served by the Flat Rock

volunteer fire department.

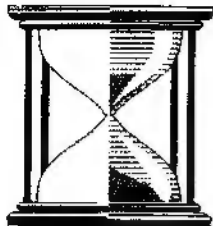
Nearly a hundred runners and walkers pounded the pavement to the finish line. The marathon helped kick-off the second day of the 1994 Flat Rock Fall Festival. High morning temperatures made the 7:45 AM start hot and muggy.

Vernon Gill, N9QBO, Johnson County ARES director, served as net control for the event. He operated from a table set up in the street next to the town's fire station.

Jack Parker, NT9J, helped organize the coverage and provided an Alinco 590T and power supply for use at Net Control. Tim Sanford, N9XNP, using his newly acquired ham radio license, served as Net liaison. Tim brought a new, quick assembling, tripod and 20 foot mast for the base antenna.

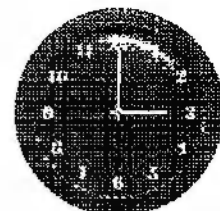
It only took about an hour for the runners to complete the five mile course. MARC members were stationed around the course to block traffic, guide the runners, and provide emergency communications.

The Flat Rock ham radio net was a major success thanks to the efforts of: Mac McCarty, NV9K; Randy Shake, KC9LC; Marilyn Parton, N9TUK; Vernie Parton, KF9VK; Lewis Beam, N9VKH; Ricky Brown, N9VDX; Gerald Bowser, N9TUL; Pat Pyle, W9PSD; Bill Brinkmann, KA9ZMU; Vernon Gill, N9QBO; J.R. Osborne, KB9HSE; Bill Bennett, N9WLA; Dave Reneau, AA9KT; Lendel Cook, W9LNX; Bob LaGrange N9SIU, and last but not least, Bob Doles, WB9AYB, on his moped mobile.
-NT9J



THE IMPORTANCE OF TIME

Hams have always been aware of accurate UTC time. This article describes some of the early methods of national accuracy. Our thanks to Charlie Sears, N9MEW for this info.



The Western Union Telegraph Company offered their clock service until the middle 1960's and this service included a clock setting circuit from the master clock at the Naval Observatory in Washington, DC.

Every hour on the hour, the master clock sent a pulse out which synchronized the local clocks and in most cases what this pulse did was briefly light (for a half to three-quarters of a second) a small red light bulb on the clock dial as the sweep second hand was yanked forward or backward the number of seconds required (usually ten or less) to bring the clock into synch with the master clock.

The pulse was sent over telephone/telegraph lines. The Great-Grand Master clock in Washington DC sent a pulse once a day to the various Grand Master Clocks which were located in Western Union main offices around the USA such as St. Louis and Chicago. I think this went out at about 3:30 AM. It was on a half hour mark, I do recall that.

In turn, the Grand-Master Clocks sent out a pulse every hour to the master clocks located in local telegraph offices all over the USA, and these in turn pulsed once an hour to calibrate:

1. The sub-master clocks in places where there were several clocks under one jurisdiction such

as a factory time-keeper's office (which in turn set the local clocks under him);

2. The local clocks wherever they were.

In the case of (1) above, many business places and factories where employees were expected to 'punch the clock' when they came to work or left work had WUTCO time-clocks.

The phone companies also used little clocks with imprints in them to stamp the time on long distance toll-tickets. These were calibrated by the clock service.

In the case of WGN Radio in Chicago (720 AM) -- and perhaps other radio stations -- was that they wired from the little red light bulb into a relay which when triggered would make the tone which was sent over the air.

Through the 1940-50 period (maybe from an earlier time to a later time) the Federal Communications Commission had a rule that all radio stations had to have Western Union Clock Service in order that the station would be on accurate time for the purpose of station identification and programs, etc.

WUTCO started their clock service sometime around the turn of the century and operated it for over sixty years. "Everywhere" where accurate time was important

had one or more WUTCO clocks, i.e. bus stations, train stations, etc. All watch and clock shops had them, as did many schools, government agencies, etc. It was common in downtown Chicago to see WUTCO clocks in many places of business.

The cost of the clock service was about \$2 per month and that included a free clock of the standard variety with a nine inch dial (no sweep second hand). Users could lease larger, more elaborate clocks with extra features and fancier designs if they desired, with the more expensive clocks leasing for \$5 per month plus the cost of time service.

One variety of clock had a sweep second hand; another had a larger, 16 inch dial. Another variety came in a wooden case (as opposed to the standard brown metal case) and the most elaborate was a large grandfather style clock with Western Union works inside it.

I think I only saw two of these grandfather clocks, as they were quite expensive to lease and had very nice ornate woodcarved cases and glass doors where one could see the pendulum as it swung back and forth.

They had one in the front office of the old Telegraph Federal Savings and Loan Association (formerly the Western Union Employees Credit Union) on Jack-

son Boulevard at LaSalle Street downtown, and the other one I know of was in the Chicago Temple Building on the third floor in the library/lounge area for members of the Chicago Temple where coffee and refreshments were served following guest speakers, etc.

When WUTCO announced that the clock service was being discontinued they sent a notice out to all subscribers telling them the time signal would not be sent any longer but allowing the subscribers to simply keep the clocks for free if they wanted them. That would have been about 1965 or so.

People who expected the clocks might have some value at a later time began getting them wherever they could, cutting deals with their owners.

At the Western Union headquarters building in Chicago there must have been at least one hundred such clocks alone (this is a ten story building downtown) and within a day or two of the time service being dropped, every single clock was gone from the walls, with electric clocks put in their place. Obviously a few WUTCO executives made off with them.

Origin: SHOWBIZ BBSI - Seattle, WA



Your wife hired me to help you clean up your shack

Georgia's hams cover floods

One week, Amateur Radio operators in Macon, Georgia were setting up equipment in a high school football field for Field Day. A week later, on the fourth of July, they were tuning up their rigs at home, in their cars, and at the local Red Cross headquarters, preparing for a real emergency. Tropical Storm Alberto was heading their way!

The next day, Central Georgians awoke to torrential rain. The pounding continued, as the center of the storm hovered over the area. By late that night, some 12 inches had fallen on ground already saturated by several previous days' precipitation.

Tom Rogers, W4AOL, didn't go to work that day. He headed straight to the radio command post. In place of the hard hat he usually wears with his construction company, he donned a headset and set to work as a liason between ARES and the Red Cross. He wouldn't go back to his regular job for another three days.

As the amount of damage became apparent, Rogers was soon joined by other members of the club in a well rehearsed vigil.

During the storm, public officials depended a good deal on information provided by the midstate hams. A road out here. A bridge down there. Homes under water. Youth camps cut off. Wherever people were in trouble, the word

got out.

As soon as the Red Cross opened shelters, hams began relaying instructions and other messages. Dick Joyner, director of public support for the local Red Cross chapter, commends the dedication of the radio operators. "They kept us in touch with the status of the shelters. Such support is crucial," Joyner points out. "If we lose phone lines, or they are not available in the temporary shelters, we have to have some kind of communication."

"They (the hams) also help us to make our plans. They can tell us how bad things really are, because they see it first hand." He adds, "It's vital we get as much warning as possible."

Motorists who are also hams were grateful for information too. "How can we get across town?" was a frequent question. "How do we get from Florida to Atlanta?" was another. In some cases, ham tourists stranded along Interstates 75 and 475, both closed to traffic because of submerged roadways and bridges, participated in the traffic analyses from their cars.

Fortunately, the weather abated. On Friday, July 8, the hams on the net began relaying health and welfare messages. "When we get into this type of situation, ARES can be counted on to keep communications open," says David Little, director of the Red Cross. "It has helped us start moving into the 21st century.

from the ARRL Letter.

BENS WEATHER TIPS

By Ben Woods Channel 8 TV

The Atlantic Ocean's hurricane season has been quiet. Almost too quiet! While the Pacific has already had eight named storms, only one has formed in the Atlantic. Of course, the one that did form (Alberto) caused Georgia enough trouble that we should be glad things are quiet.

Late August and early September are the peak times for hurricane formation in the Atlantic. When a tropical storm or hurricane is churning up the Atlantic, hams can tune into a Hurricane Weather Net. Frequencies are 14.275 mhz or 14.325 mhz. Let's hope that any storms that form stay away from land!

Summer keeps rolling right along. Even though area schools will be starting up soon, there's still quite a bit of summer weather to go. July in Indianapolis was very dry. Only 1.27 inches of rain fell the entire month (well below the average of 4.47"). In fact, last month was the driest July in 20 years. Temperatures were closer to normal for the month. The city averaged 75.5 degrees which is only 0.1 degrees off the average of 75.4.

The outlook for August is cooler and slightly drier than average conditions across Indiana and much of

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the Midwest. We've already had some cool, down-right fall-like days this month.

The inaugural running of the Brickyard 400 at the Indy Motor Speedway had delightfully cooler weather. I hope they don't count on it being that cool next year.

MARC

Mid-State Amateur Radio Club

Post Office Box 836 Franklin, In. 46131

Club Repeater: 146.835

The Mid-State Amateur Radio Club meets at 8:00 AM the third saturday of each month in the Johnson County Law Enforcement Bldg. on Hospital Road in Franklin, In. All are welcome to attend.

For membership information call Mac, NV9K at (317) 736-6320

President: Roy Barnes N9PFZ

RACES: Joe Vergara KA9ZPA

V. President: Randy Shake KC9LC

ARES: Vernon Gill N9QBO

Secretary: Marilyn Parton N9TUK

Activities: Jack Parker NT9J

Treasurer: Mac McCarty NV9K

Rpt. Trustee: Dave Julian WB9YIG

Editor: Mac McCarty NV9K

Weather: Ben Woods Channel 8